

ILLINOIS COMMERCE COMMISSION

DOCKET NO. 03-0707

DIRECT TESTIMONY

OF

JAMES J. MASSMANN

Submitted on Behalf

Of

UNION ELECTRIC COMPANY

d/b/a AmerenUE

April 2004

****Denotes Highly Confidential Information****

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UNION ELECTRIC COMPANY

d/b/a AmerenUE

Q. Please state your name and business address.

A. My name is James J. Massmann. My business address is 1901 Chouteau Avenue,
St. Louis, Missouri 63103.

Q. By whom are you employed and in what capacity?

A. I am employed as a Natural Gas Supply and Transportation Director in the
Natural Gas Supply and Transportation Department of AmerenEnergy Fuels and
Services Company (AFS).

Q. Please explain the relationship between AFS and Union Electric Company.

A. AFS provides the fuel and natural gas supply and management services for all
affiliates of Ameren Corporation. The Natural Gas Supply and Transportation
Department of AFS manages all of the gas supply business activities for Central
Illinois Public Service Company d/b/a AmerenCIPS (AmerenCIPS or Company),
Central Illinois Light Company d/b/a AmerenCILCO (AmerenCILCO), Union
Electric Company d/b/a AmerenUE (AmerenUE), and Ameren Energy
Generating Company (AEGC).

Q. Please describe your educational background.

A. I received a Bachelor of Science degree in Mechanical Engineering in 1980 and a
Masters of Science degree in Engineering Management in 1986, both from the
University of Missouri – Rolla.

26 **Q. Please describe your pertinent employment history.**

27 A. I was employed by Union Electric Company in August 1982 and by Ameren
28 Corporation upon the December 1997 merger of Union Electric Company and
29 CIPSCO Incorporated. I was promoted to my current position of Gas Supply and
30 Transportation Director for AmerenEnergy Fuels and Services Company on
31 November 1, 2000. My responsibilities as a Gas Supply and Transportation
32 Director include managing and overseeing the daily operations and business
33 activities related to providing gas supply to Ameren's gas fired generation and
34 AmerenUE's gas utility company that serves the Alton, Illinois service territory.
35 Prior to being promoted to the position of Natural Gas Supply and Transportation
36 Director, I held several positions in the Natural Gas Supply and Transportation
37 Department, including Gas Supply Executive and Gas Systems Analyst. Prior to
38 that, I was a Resource Planning Engineer in the Corporate Planning Department,
39 an engineer in the Engineering & Construction Department, and an engineer in
40 the Nuclear Engineering Department.

41 **Q. Are you familiar with the subject matter of this proceeding?**

42 A. Yes, I am. This docket is the Commission's annual reconciliation proceeding
43 related to AmerenUE's Illinois Uniform Purchased Gas Adjustment Clause
44 (PGA). It was established for the purpose of reviewing the Company's gas
45 procurement activities under its PGA for the twelve-month period ending on
46 December 31, 2003.

47 **Q. What is the purpose of your testimony in this proceeding?**

48 A. The purpose of my testimony is to provide a description of the gas procurement
49 activities performed for the AmerenUE gas utility system.

50 **Q. Please describe AmerenUE's gas system in Illinois.**

51 **A.** The AmerenUE gas distribution system serves approximately 17,545 gas
52 customers in Alton, Illinois and in adjacent areas. This system serves residential
53 (67% of sales), commercial (25% of sales) and industrial (8% of sales) customers.
54 The Company's customer load requirements are highly weather sensitive with
55 sharp variations in demand occurring during the peak winter season. During
56 2003, AmerenUE's Illinois distribution system was directly connected to one
57 interstate pipeline, Mississippi River Transmission Corporation (MRT), which is
58 regulated by the Federal Energy Regulatory Commission (FERC), and to one
59 intrastate pipeline, Illinois Gas Transmission Company (IGT), regulated by this
60 Commission. The IGT pipeline receives upstream deliveries of gas from Natural
61 Gas Pipeline Company of America (NGPL). The FERC governs the maximum
62 and minimum rates that the interstate pipelines are allowed to charge their
63 transportation and storage customers such as AmerenUE. The AmerenUE gas
64 distribution system in Alton, Illinois is separate from the Company's Missouri gas
65 operations.

66 AmerenUE purchases its gas supply from major gas producers,
67 independent gas producers, gatherers, and marketers, and transports the gas
68 through two interstate pipelines and one intrastate pipeline. There were no local
69 gas fields in or near the Company's gas service area from which the Company
70 could have reliably purchased direct gas supply. AmerenUE has no on-system
71 natural gas storage, but does lease storage services from MRT under the terms and
72 conditions of MRT's FERC-regulated Firm Storage Service (FSS). The FSS
73 storage service has a maximum storage quantity of 956,184 MMBtu and a daily

74 withdraw capability of 16,656 MMBtu/day. The Company also operates a
75 propane-air peaking facility in Alton Illinois.

76 **Q. Mr. Massmann, would you please describe the Company's general**
77 **purchasing policy for acquiring natural gas supply and transportation and**
78 **storage capacity?**

79 A. AmerenUE's natural gas supply and capacity acquisition policy is essentially a
80 product of its utility obligation to serve. As a regulated public utility, the
81 Company is obligated to provide natural gas service to all present and future
82 customers in its service area; it is required to meet changes in its customers'
83 demand for gas, without regard to the cause; and it is responsible for providing
84 reliable service at reasonable cost. Each gas purchasing decision made on behalf
85 of the Company is directed at satisfying this obligation to serve in the most
86 economic way.

87 **Q. Would you please explain the general gas supply portfolio strategies utilized**
88 **by the Company to provide reliable service to its customers at a reasonable**
89 **cost?**

90 A. Although the Alton, Illinois distribution system is captive the MRT pipeline
91 AmerenUE continually looks for opportunities to diversify its pipeline capacity
92 and gas supply sources to meet its customers' requirements for natural gas at the
93 lowest reasonable cost. ** _____

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107 _____** The objective is to create a portfolio that mitigates price
108 volatility for the sales customers, reduces natural gas supply acquisition risk,
109 enhances system reliability while maintaining flexibility to manage load
110 variations, and separates physical delivery and financial exposure. **_____
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114 **Q. Please describe the gas transportation and storage services that were**
115 **available for use by AmerenUE in 2003 to supply gas to its Illinois**
116 **distribution system.**

117 A. The Company signed Firm Transportation Service and Firm Storage Service
118 contracts with MRT on November 1, 1993 as a result of FERC Order No. 636,
119 which required interstate pipelines to unbundle their sales and transportation
120 services. The firm transportation contract was extended through April 30, 2007.
121 The term for the FSS storage contract was extended to May 15, 2008.

The Company also executed a firm transportation agreement with IGT on December 1, 1993 and amended it to increase capacity in 1998. The contract with IGT was extended for a period from December 1, 2001, through October 31, 2006. Firm transportation agreements with NGPL, the interstate pipeline upstream of IGT, were executed on December 1, 1993 and extended for the period from December 1, 2001 through October 31, 2006. AmerenUE also executed interruptible transportation agreements with MRT on December 1, 1989 and with IGT on September 17, 1990.

Q. Please provide a table that summarizes the specific pipeline services that were available to AmerenUE for transportation and storage during 2003.

A. A table summarizing such services is set forth below:

Contract	Service	Description	MDCQ (MMBtu/d)
462	FTS	MRT Firm Transport	20,887/18,636 ⁽¹⁾
#503	FSS	MRT Firm Storage	16,656 ⁽²⁾
I100010	FT	IGT Firm Transport	8,000 MMBtu/d Oct - Apr 0 MMBtu/d May - Sept
106214	FTS	NGPL Firm Transport	8,530 ^(3,4)
17	IT	MRT Interruptible Transport	15,000

(1) Peak/Off-Peak season

(2) Storage injections/withdrawals transported to/from facilities on FT #462 and limited to capacity on FT#462.

(3) Upstream capacity delivery to IGT.

(4) Total contract includes 530 MMBtu/d of firm capacity delivered to AmerenUE Fisk/Lutesville system in Missouri. Fixed reservation charges are allocated to each distribution system by primary delivery point capacity.

Q. Did the Company alter any of its gas transportation or storage agreements in 2003?

A. No. The majority of AmerenUE's firm transportation and storage capacity is under long term contracts which expire in 2006, 2007 and 2008. Because the majority of the capacity is within its primary contract terms, AmerenUE did not

renegotiate any of its firm transportation and storage contracts during the reconciliation period. While the Company has quite favorable terms under the current agreements, we evaluate, on an ongoing basis, alternative pipeline suppliers, and will opt to renegotiate contracts when market conditions warrant and contract terms allow.

Q. What steps has AmerenUE taken to minimize its pipeline capacity costs during the reconciliation period?

A. In addition to purchasing only the level of firm capacity necessary to meet the needs of its sales customers, AmerenUE aggressively negotiates capacity discounts from pipeline suppliers. **

Q. How does AmerenUE determine the appropriate level of capacity resources required to meet the needs of its firm customers?

A. To properly design the natural gas supply resources it requires, the Company conducts a demand study to determine the load profiles for the Company's service areas. This demand study utilizes statistical tools to analyze the relationship between historical temperatures and metered volume data to develop a regression model to forecast daily demands. The demand study is routinely updated to capture changes in demand caused by customer growth, customer loss, conversions to transportation service, increases in appliance efficiency, and other

factors that impact the demand profile of the system over time. Each year the accuracy of the regression models is reviewed against the prior winter's actual system performance to determine if significant changes in firm sales demand have occurred. If significant variations are discovered, a new demand study will be prepared to revise the accuracy of the model.

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Q. How does AmerenUE determine the proper allocation of leased storage in its supply portfolio?

A. Based upon the demand study analysis, AmerenUE selects the level of leased storage capacity required to operationally balance its highly variable firm sales loads. **

** When

considering leased storage services, the costs of storage tariffs are carefully analyzed. AmerenUE considers the cost to transport gas into and out of storage, factoring in any negotiated discounts, and the cost of carrying gas in storage as well as any applicable shrinkage factors. The Company also examines the

194 opportunity to hedge gas prices by injecting typically low priced summer gas that
195 is subsequently withdrawn during higher price periods. In terms of alternatives to
196 leased storage, AmerenUE considers the premium that reliability and variability,
197 both of which are extremely important to the Company, carries in physical gas
198 supply contracts.

199 **Q. Why is leased storage important to providing high reliability?**

200 A. Storage is the most reliable source of firm deliverability and gas supply during
201 critical winter operations. Gas injected into storage during off-peak periods is
202 available during peak periods with fewer weather-related concerns that impact
203 flowing supply, such as well freeze-ups. The amount of gas that can be
204 withdrawn from leased storage is a function of known contract provisions.
205 AmerenUE can respond to changing firm sales customer requirements by varying
206 leased storage activity, and thus can avoid costly pipeline balancing penalties. To
207 summarize, leased storage enables daily and hourly operational balancing of
208 system loads, avoids of costly pipeline balancing penalties, and provides hedging
209 against market price variability.

210 **Q. Mr. Massmann, were any other on system supply sources available to**

211 **AmerenUE during 2003?**

212 A. Yes, AmerenUE maintains a propane-air blending plant in Alton, Illinois with an
213 operational capacity of approximately **_____**. This plant
214 only operated for normal testing during the reconciliation period.

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215 **Q. Please describe AmerenUE's gas supply portfolio.**

216 A. The Company's gas supply portfolio for Illinois was divided into different sources
217 based upon the Company's firm pipeline capacity on MRT and NGPL. This
218 allowed for supply diversity while retaining economies of scale.

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230 For November and December 2003, new firm gas supply agreements were
231 acquired through competitive bidding. ** _____

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Q. Describe the relationship between these firm gas supply sources and the corresponding pipeline transportation capacity.

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A. The maximum daily firm pipeline capacity and gas supply volumes that were available during January, February, and March 2003 are described in the table below. “MDCQ” means “Maximum Daily Contract Quantity”. Firm gas supply quantities do not reflect exclusions for fuel and loss.

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263 **Q. Please briefly describe AmerenUE's general price hedging strategy.**

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284 **Q. What is the purpose of implementing a price hedging strategy?**

285 A. The primary purpose of hedging is to reduce exposure to the volatility and
286 uncertainty of natural gas market prices in a future period. When a hedge is put in

place, the Company is establishing a future position in the gas market. This position may end up below or above the market price of gas that ultimately occurs during that future period. The purpose of the position is to reduce or eliminate exposure to future market conditions that are unknown and uncertain when the hedge is originally put in place. Thus, hedges are used to reduce price volatility and are not intended to “beat the market” or create low gas prices.

Q. Mr. Massmann, is the gas supply activity for AmerenUE limited by a corporate risk management policy?

A. Yes. Ameren has instituted risk management policies to monitor and govern all energy commodities trading within the corporation for electricity, coal, natural gas, oil, and emissions credits. All natural gas transactions for the three Ameren gas utilities are subject to the AFS Risk Management Policy.

Q. Would you please elaborate how of the AFS Risk Management Policy affects natural gas supply procurement?

A. The purpose of the policy is to provide the structure, processes, and systems to monitor all natural gas transactions as they are completed and to provide guidelines and limits to the scope and type of allowable natural gas transactions. The policy for the Ameren gas utilities parallels the strategies that I have outlined thus far in my testimony, but creates upper and lower limits that bound these strategies. The gas utility supply portfolio strategy is intended to manage natural gas purchase price, volumetric, and counter-party risks for the gas supplies required for the three Ameren gas utilities. Because the utilities are naturally short supply, this strategy helps to reduce the impact of volatile gas prices on the utility customers by levelizing the PGA from season to season. It should also be

311 noted that the utility's goal of exchanging price certainty for price variability is
312 not intended to reduce gas costs to the utility's customers. "Beating the market"
313 is not (and should never be) the object of a successful hedging strategy for a
314 utility. Managing price volatility (or dampening price swings) is the primary goal
315 of the gas supply strategy which has also been incorporated into the AFS Risk
316 Management Policy.

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357 **Q. What type of price forecasts does AmerenUE employ for its ** _____ ****
358 **gas supply purchasing and hedging horizon?**

359 **A.** Since natural gas futures are actively traded on the NYMEX for seventy-two
360 consecutive months, much of the underlying price forecast assumptions are
361 derived using the current NYMEX forward strip activity. AmerenUE also
362 reviews the price trend studies and information provided by Risk Management
363 Inc., an outside energy consulting firm. ** _____

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Q. Did the Company meet its volumetric and price hedging targets during the reconciliation period?

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A. Yes, during the first half of 2003, the Company was transitioning its portfolio to meet the parameters set out in the AFS Risk Management Policy with the goal of being in complete compliance by November 1, 2003. Compliance is measured for each company. The Alton, Illinois gas distribution system is a part of the larger AmerenUE risk management portfolio of supplies. The Alton, Illinois gas distribution system employed storage and fixed priced packages to hedge price risk.**

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399 _____** These pricing structures are identified in the table provided on

400 Pages 12 and 13 of this testimony.

401 **Q. Can you please describe the process that AmerenUE utilizes to purchase**
402 **reliable natural gas supply at a reasonable cost?**

403 A. AmerenUE purchases the majority of its firm gas supply from independent and
404 major producers that own natural gas reserves, operates physical gas production
405 facilities, and have proper credit. The Company is concerned that marketing
406 companies that have no production and only provide brokering services are not as
407 reliable as companies that own and control gas production or companies that have
408 contracted access to gas production. The Company also seeks to attain
409 geographic diversity in its purchased gas supply sources so that supplies are
410 purchased from multiple producing areas such as the Mid-Continent, the Gulf
411 Coast, and Louisiana.

412 To determine an optimal group of firm suppliers, the Company requests
413 bids on gas supply packages from a proven group of suppliers with acceptable
414 credit resources. Bids for supply packages are usually priced using either
415 published indices such as Inside FERC Gas Market Report or NYMEX. Selection
416 of bid packages from among suppliers is not made solely on the lowest cost but
417 also on the level of flexibility provided by the supplier and the supplier's strength
418 in a certain geographic area. AmerenUE also makes an effort to balance supply
419 packages among its suppliers to insure that its portfolio is not too heavily
420 weighted with supplies provided by one supplier. The firm physical supply

transactions are contracted utilizing either an Ameren Master Agreement or a North American Energy Standards Board (NAESB) Agreement.

Q. Does AmerenUE purchase gas supplies on the daily and monthly spot market?

A. Yes. Monthly spot purchases usually occur in the summer to fill in storage injection requirements. The monthly spot purchases are made using a bid solicitation with the winning bid selected based upon the lowest reasonable cost. Daily spot purchases are made to meet unanticipated daily needs or to take advantage of a daily price drop for storage injections. Price quotes are obtained for daily spot purchases using Intercontinental Exchange (ICE), an electronic trading platform, and soliciting quotes by telephone from suppliers. Daily indices are also tracked in industry publications such as Platt's Gas Daily and NGI's Daily Gas Price Index.

Q. Were the firm gas supplies acquired by AmerenUE generally available during the peak seasons in the reconciliation period and on peak days experienced by the Company?

A. Yes, the gas supplies were available during the periods indicated above with no exceptions.

Q. Mr. Massmann, how did the Company plan the utilization of its supply sources?

A. The supply sources were utilized by AmerenUE to meet the operational characteristics of its citygate loads and to comply with contract and/or tariff restrictions incorporated within the various pipeline and supplier agreements. Baseload gas, typically being the lowest cost and subject to more contract

445 restrictions, has the highest priority of use and flowed continuously during the
446 periods when agreements were in effect. Swing gas supply agreements were
447 utilized to meet citygate load swings outside the range of the FSS storage
448 withdrawals and to control the FSS storage inventory to maintain adequate
449 storage deliverability through the month of February. FSS storage withdrawals
450 provided the “No-Notice” service required to manage significant and
451 unpredictable load swings. The propane plant was available to be utilized to meet
452 peak day demand that exceeded firm pipeline deliverability. Finally, spot market
453 purchases were utilized during the off-peak season.

454 **Q. What steps does the Company take on peak days when the daily demand**
455 **level exceeds the supply available?**

456 A. If daily demand exceeds scheduled gas supply, assuming there is still available
457 pipeline capacity, any available “No-Notice” storage withdrawals would first be
458 utilized to meet demand. If demand continued to be in excess of all flowing
459 supplies and storage withdrawals, then AmerenUE would nominate and schedule
460 any unutilized and available firm swing gas supplies and pipeline capacity. At
461 this point, all available firm contracted interstate pipeline resources and on-system
462 storage resources would be maximized. The Company would then investigate the
463 availability of any additional capacity and/or supplies. If none were available,
464 then curtailment of all interruptible services would be declared on the AmerenUE
465 distribution systems. In addition, transportation customers would not be allowed
466 to withdraw from their imbalance banks with the Company. Finally, the
467 propane-air plant would be operated.

468 **Q. What was the Company's peak usage day in 2003?**

469 A. The peak demand day occurred on January 23, 2003 with a total system sales
470 demand of 22,974 MMBtu.

471 **Q. What sources of supply were used to meet the demand on this peak day?**

472 A. The following table sets forth the supply sources that were used on January 23,
473 2003:

Supply Source	MMBtu (delivered)
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474 **Q. Was it necessary to curtail interruptible customers or utilize the propane**
475 **plant during 2003?**

476 A. No.

477 **Q. Does AmerenUE have procedures for monitoring the delivery of natural gas**
478 **from its interstate pipeline suppliers?**

479 A. Yes, it does. The Company monitors and records gas flow volumes from a
480 majority of the delivery points with the interstate pipelines. The facilities where
481 AmerenUE distribution systems interconnect with the interstate pipelines are
482 referred to as M/R (Metering and Regulation) Stations or Citygate Stations where
483 the interstate pipelines perform pressure reduction and transfer custody
484 measurement. Most M/R stations utilize orifice meters as the primary metering
485 devices which are integrated on-site with electronic flow computers. The

486 electronic flow computer data is telemetered from the M/R stations to Ameren
487 Services' Gas Operations office in Springfield, Illinois. On a routine basis,
488 AmerenUE compares its delivery volumes to the pipeline metering statements to
489 detect errors or deviations. The Company may also make arrangements to be
490 present during calibration and inspection of measurement equipment by the
491 interstate pipelines.

492 **Q. Were the Company's gas purchases during the year consistent with its**
493 **procurement policies?**

494 A. Yes, AmerenUE utilized the most economical mix of gas sources available under
495 the given conditions.

496 **Q. Do you believe AmerenUE's procurement of natural gas was prudent during**
497 **2003?**

498 A. Yes, I do.

499 **Q. Does this complete your testimony?**

500 A. Yes, it does.

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BEFORE THE STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission)	
On Its Own Motion)	
)	
vs.)	
)	
Union Electric Company,)	Case No. 03-0707
d/b/a AmerenUE)	
)	
Reconciliation of revenues)	
collected under gas adjustment)	
charges with actual costs.)	

AFFIDAVIT OF JAMES J. MASSMANN

STATE OF MISSOURI)	
)	SS
CITY OF ST. LOUIS)	

James J. Massmann, being first duly sworn on his oath, states:

1. My name is James J. Massmann. I am a Natural Gas Supply and Transportation Director at Ameren Energy Fuels and Services Company.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony consisting of ____ pages, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

James J. Massmann

Subscribed and sworn to before me this ____ day of _____, 2004.

Notary Public